JOURNAL
OF THE
BRITISH SOCIETY OF DOWSERS

Vol. V. No. 38 December, 1942

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Price to Non-Members, **1/3**

BRITISH SOCIETY OF DOWSERS

COUNCIL

President :

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Address : York House, Portugal Street, London, W.C.2.

Hon. Secretary and Treasurer :

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Address : 56 Oxhey Road, Watford, Herts.

Miss M. E. MACQUEEN — Major C. A. POGSON, M.C.
Dr. HECTOR MUNRO, M.B. — Captain W. H. TRINDER

OBJECTS OF THE SOCIETY

(*a*) To encourage the study of all matters connected with the perception of radiation by the human organism with or without an instrument.

(*b*) To spread information amongst members, by means of a journal, lectures and other means, about the use of dowsing for geophysical, medical and agricultural and other purposes and for tracing objects animate or inanimate.

(*c*) To keep a register of dowsers for water, minerals, oil, and for other purposes.

RULES OF THE SOCIETY

I.—Membership.

The Society is open to all persons interested in radiation-perception.

The Council has power to appoint honorary members.

II.—Subscription.

The subscription is five shillings per annum, or three guineas for a life member.*

III.—Management.

The Society will be managed by a Council consisting of a President, who will act as Chairman, and five members, one of whom will act as Treasurer and Secretary.

The President and members will be replaced as necessary by the Council, appointments being confirmed at a General Meeting.

All questions regarding the publication of the journal, lectures, meetings, etc., will be settled by the Council.

Decisions of the Council will be arrived at by correspondence if necessary, the facts being recorded in the Minute Book.

Decisions will be decided by a majority vote, the Chairman having a casting vote.

The Council has power to co-opt other members for special purposes.

IV.—Accounts.

The financial year will be from July 1st to June 30th.

Accounts will be published annually within two months after the end of the financial year.

Accounts will be audited privately.

V.—General Meeting.

A General Meeting will be held annually, and other meetings when considered necessary by the Council.

* Pending a revision of the rates of subscription, no more life members are being accepted at present.

JOURNAL OF THE

BRITISH SOCIETY OF DOWSERS

Vol. V. No. 38 December, 1942

NOTICES

Members are reminded that subscriptions for the year July 1st, 1942, to June 30th, 1943, were due on the former date.

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Erratum. In line 7 on page 83 of Journal No. 36, the word "after" should be "up to."

* * * * *

The Editor would be glad to hear of any case of large batches of eggs having been tested for sex by dowsing methods and particulars of the result.

* * * * *

The following book, kindly presented by Rev. M. C. Potter, D.Sc., M.A., has been added to the Library :—

Author	Title	Pages	Postage in pence
Waller	Physiology, the Servant of Medicine	141	5
Potter	Bio-Electric Potentials	43	1½

* * * * *

The price of *Journals* to non-members is 1s. 3d.

The price of new *Journals* in excess of the free number, and of old *Journals* to members is 9d. and 6d. respectively.

Six free copies of the *Journal* will be given on request to writers of articles in it in addition to the usual copy.

* * * * *

The Medical Society of Radiesthesia will shortly publish a journal at the price of 2s. 6d., postage 2d. extra. Members desiring a copy should apply to Dr. Guyon Richards, 9 Fordington Road, Highgate, N.6, and forward 2s. 8d. This number contains, amongst others, articles by Mr. Dudley d'A. Wright and Mr. Cecil Maby.

* * * * *

The Society's badges can be obtained from the Honorary Secretary. Owing to the increased cost of postage the price is now 1s. 3d. post free.

* * * * *

Communications for the Editor, and inquiries, should be sent to Colonel A. H. Bell, York House, Portugal Street, London, W.C.2.

NEW MEMBERS.

* Life Members.

BISSET, Mrs., Craigburn, Fortrose, Ross-shire.
CAMERON, E. C., Moray Group, Maskeliya, Ceylon.
CAMERON, Mrs. J. W., c/o Veterinary Infirmary, Barnstaple, N. Devon.
CHURCHES, Dr. EVELYN, Hersent House, Winchester.
COATES, Able Seaman A., The Hutt, Scotsburn, Rowledge, Farnham, Surrey.
CONNER, Mrs. TARRANT, 247 Green-Lanes, N.4.
DAVIE, Mrs., Oaklea, Oakwood Avenue, Purley, Surrey.
GRANT, W. D. G., Scotsbridge House, Rickmansworth, Herts.
HAYES, Mrs. TRANCHELL, 7 Princes Gate, S.W.7.
HUNTRISS, G., St. Elmo, Cleeve Hill, Cheltenham, Gloster.
MINNS, F. J., 67 68 Saint Aldates, Oxford.
MONIES, Mrs. G. H., at 7 Hazeldene Road, Aberdeen.
MUIR, J., 56 Beldon Crescent, Liverpool.
MACCARTHY, Mrs., 1217 E. Broadway, Columbia, Missouri, U.S.A.
POTTER, Rev. Professor M. C., D.Sc., M.A., Corley Croft, York Avenue, New Milton, Hants.
PEDLEY, G., 19 Ovenden Wood Road, Pellon, Halifax, Yorks.
PEDLEY, R., 19 Ovenden Wood Road, Pellon, Halifax, Yorks.
PRATT, Venerable J. H., B.A., B.Litt., Rossorry Rectory, Enniskillen, N. Ireland.
STANNARD, Miss N., 36 Old Hale Way, Hitchin, Herts.
WESTLAKE, A. T., B.A., M.B., B.Chir., M.R.C.S., L.R.C.P., Sandy Balls, Godshill, Fordingbridge, Hants.
WILSON, R. G., 10 Clifton Place, Brighton, Sussex.

CORRECTIONS.

BOBADILLA, L., 1952 Strathmore Street, Wilmar, California.
BROOK, A., Brookfield, 132 Duke Street, Southport, Lancs.
BROWN, D. G., Blythswood, Yealm Road, Newton Ferrers, near Plymouth.
CANN, F. N., 15a Harborough Road, Oadby, Leicester.
*DE CASTRO, Miss M. B., 12 Buckland Crescent, N.W.3.
COWLEY, Dr. Flora L., 2218 N.W. 19 Street, Oklahoma City, Oklahoma.
ELLIOTT, Rev. G. M., 97 Clifton Hill, St. John's Wood, N.W.8.
FORBES, J. FOSTER, F.R.A.I., F.S.A. Scot., Gloucester House, 38 Queen's Gate Terrace, S.W.7.
FRANKLIN, T. BEDFORD, M.A., F.R.S.E., 16 Learmonth Place, Edinburgh 4.
HAWKSLEY, L., 75 Victoria Road, Kensington, W.8.
MACKAY, F/Lt. R. J., c/o S7 (B), Adastral House, Kingsway, W.C.1.
MAY, S/L. Rev. E. W. L., R.A.F., c/o Post Office, Thorpe Thewles, Stockton-on-Tees.
MITCHELL, J. A., Defence Works Building, Mazagon, Bombay.
NICHOLSON, D. B., Highfield, Knowle Lane, Wickham, Hants.
SMITH, Mrs. E., 1 Pearl Court, Devonshire Place, Eastbourne, Sussex.
PEAKE, B. S., 21 Surrey Road, Bournemouth.
WOODWARD, F. R., c/o Stuart Turner Ltd., Henley-on-Thames, Oxon.
YATES, Mrs., 14 Stanford Court, Cornwall Gardens, S.W.7.

ANNUAL GENERAL MEETING, 1942

The eighth Annual General Meeting was held at the rooms of the Royal Asiatic Society at 3 p.m. on October 14th, 1942.

Members present were Colonel A. H. Bell (Chairman), Mr. S. Bulford, Miss M. Cameron, Miss M. B. de Castro, Captain D. K. J. Chilholm, Mr. H. Collins, Mrs. Tarrant Conner, Mrs. R. Dundas, Mr. L. Eeman, Mrs. Glanville, Mr. G. C. N. Goldsmith, Miss E. M. Harding, Mrs. Tranchell Hayes, Mrs. Hone, Mrs. L. Kempster, Miss H. Leather, Dr. H. Munro, Mr. and Mrs. J. Neal, Dr. W. Nunan, Miss C. Ouless, Dr. Guyon Richards, Mr. E. F. Ross, Mr. J. A. Skelton, Mr. W. C. Slater, Mrs. Kingsley Tarpey, Mr. J. L. Taverner, Dr. T. T. B. Watson, Mr. V. D. Wethered, Mr. J. D. Wheatcroft, Mrs. Yates, Lieut.-Colonel H. M. Edwards (Hon. Secretary).

2. The Minutes of the 1941 meeting were taken as read, a full report of the proceedings having been published in the *Journal* of December, 1941.

3. Colonel Bell read the following Report :—

Ladies and Gentlemen,

Here we are, in the fourth year of the war ; the Society is still going strong, though there have been several sad departures from our ranks.

In the list of members issued with the *Journal* in September last year there were shown 77 life members and 387 annual subscribers ; in the corresponding list this year there are the same number of life and 404 annual members ; this signifies an increase of 17 members, as against a reduction of 71 in the previous year.

I much regret that several familiar names no longer appear in the list ; Lieut.-Colonel Robson was amongst the officers of the Home Guard who were killed in the tragic episode on Salisbury Plain several months ago ; Mr. Lincoln Tootill, the well-known Yorkshire water diviner, died in a nursing home early this year. Mrs. Marion Cran, famous for her books on gardening and for her novels, in one of which she introduced a water diviner and referred to Mr. Budgett's experiments, passed away a few weeks ago ; so, too, did Major de Montmorency, who had practised water divining with great success in America, as described in his interesting book of reminiscences called *Sword and Stirrup*.

Members will be glad to hear that Dr. and Mrs. Dudley Wright, who had been wrecked in the " Zam Zam " and had been interned in Germany, have been released and should have reached South Africa several weeks ago.

Members who were at the General Meeting last year may remember that Colonel Edney asked for the names of dowsers who would be prepared to undergo tests in the finding of unexploded bombs. Certain experiments were carried out by the

Army with a large measure of success, but for no assigned reason they were terminated abruptly. Readers of Hansard may have noticed some questions which were put in the House of Commons in March last to the Financial Secretary of the War Office. The questions were actually asked through that obliging mouthpiece, Mr. R. R. Stokes. They referred to the experiments as "bogus," and had obviously been prompted by some person ill disposed towards dowsing and entirely ignorant of its possibilities. The questions were commented on in several newspapers, and a false statement in the *Lancet* was rectified in a subsequent issue at my request.

An unfortunate incident occurred in connection with one of our members who had sent out circulars to the relations of missing men offering for a fee to inform them whether the men were alive or dead, and if alive their state of health. The police, adopting their usual provocative procedure, put forward a sham inquiry, with the result that our member had two charges brought against him of obtaining 5s., and attempting to obtain 7s. 6d. by false pretensions with intent to cheat and defraud, and was convicted. The charges were, of course, absurd, as our member had no intention of cheating or defrauding, but I am bringing this case to your notice to show how careful people should be in asking fees for services of a kind which, in the present state of general ignorance of certain types of phenomena, are regarded as illegal.

Owing to the exaggerated secrecy which surrounds all activities in the Services, one hears little of work carried out by dowsers on their behalf. However, we were told in the *Daily Mail* not long ago that a squad of water diviners had been recruited at a northern school of military engineers, and in the *Illustrated London News* last June it was mentioned that Mr. Waterson, the High Commissioner for South Africa, who accompanied General Smuts on his tour in the Middle East, spoke of a special water-divining unit provided by the Union of South Africa which had found water in many places in the desert where Bedouins had never found it.

I have during the past year received several requests from individuals and public bodies for the names of water diviners.

It is interesting but depressing to note that according to the *Catholic Times* of June 5th a decree has been issued by the Holy Office forbidding Bishops and religious Superiors to practise radiaesthetics with reference to personal circumstances or for purposes of divination. This presumably puts a stop to the noble work of healing which has been carried out for many years by such splendid men as the Abbés Bouly and Bourdoux and several other priests of the Roman Catholic Church.

In August last I was asked by an official of the B.B.C. if I could provide talks on dowsing to be translated into Portuguese

and broadcast to Portugal. Eventually two talks were so broadcast, one on dowsing in general written by myself, and another on dowsing for water and minerals written by Captain Trinder.

The Medical Society for the study of Radiesthésie, of which Dr. Richards is President, has continued its meetings, and a journal containing a number of lectures will, it is hoped, be published shortly.

An account of some interesting experiments in healing carried out by Mrs. Kingsley Tarpey, in which a phenomenon of a new and wonderful kind was demonstrated, was published in a recent number of the *Journal*.

The *Journal* has been produced on the same lines as hitherto, and it has been found possible not to make any substantial reduction in the size.

It is hoped that members will send contributions of any original experiences or on any matters of general interest, to the Editor. Hitherto contributions have come in fairly regularly, but recently there has been a notable falling off. If there are no contributions, there can be no *Journal*.

As Editor, I thank all those who have helped to keep the *Journal* in being during the past year by sending articles for publication and by reviewing books, namely: Mr. Donald Brown, Mr. Staveley Bulford, Mr. D. O. King, the Countess Maryla de Chropowicki, Mr. Bedford Franklin, Mr. Noel Macbeth, Miss Gretta McKeogh, Mr. Cecil Maby, Mr. Parkington, Dr. Richards, Mrs. Kingsley Tarpey, Captain Trinder, Mr. A. J. Wheeler.

Since the Society was started a number of books on subjects in which we were interested has accumulated. A list of these books was published in No. 35 *Journal*, and they are sent out to members on application. They are actually kept at my house at Cuckfield. Four bound volumes of the *Journal* and a few other books have lately been added to the list, so recent members now have the opportunity of seeing what has appeared in back numbers during the nine years of the Society's existence.

Now I want to say something about the work of investigation which has been going on for the last few years.

In May, 1935, a small Investigation Committee was formed consisting of the late Major R. Creyke, Dr. Dudley Wright, Mr. Bedford Franklin and myself. Later on, the Committee was reinforced by Mr. Maby and Captain Trinder, and they, together with Mr. Franklin, have been the heart and soul of all the research which has been carried out recently.

I think it was on the introduction of Dr. Wright that Mr. Maby first came in contact with the Society; he delivered a lecture to us here on June 27th, 1935, and shortly after joined the Society as a Life Member. This was a most fortunate occurrence for

us, as Mr. Maby is a scientist of wide interests and unusual breadth of mind. Moreover, he had a Biophysical Laboratory of his own, which he had started many years before, and for the last few years this laboratory has been devoted entirely to the furtherance of dowsing research.

Some of the fruits of this research are well known to most of you, for in 1939 the book called *The Physics of the Divining Rod* was published, in the writing of which Mr. Franklin collaborated with Mr. Maby. This book is far ahead of all others which have been produced in any language in its scientific treatmet of dowsing and in the value of the conclusions arrived at. It was on the whole well received in the scientific world apart from the captious remarks of a few scientists of the old-fashioned orthodox type. The late Sir Oliver Lodge expressed his approval of the book, and various officers of the Army, Navy and Air Force became actively interested in the possible war-time application of dowsing principles. Lectures were given on the subject of the book at the Imperial Chemical Industries, the Royal Society of Arts, and at London and Bristol Universities, and to numerous smaller gatherings.

I must add that the methods of field prospection advocated in the book are used very successfully by Mr. Maby himself, for since 1937 he has made some 36 prospections, in which the only errors were two over-estimates of depth and two over-estimates of yield. To my mind this shows a very high standard of achievement.

At the suggestion of M. le Vicomte de France it was arranged (as stated in the *Journal* for June, 1940) that quarterly reports on the investigations carried out in the laboratory should be sent to a number of radiesthesists on the Continent. These reports have, of course, had to stop during the war, but one of them was published in Dr. Regnault's Journal, *La Côte d'Azur Médicale*, for January-March, 1942.

Since the war started Mr. Maby has been approached three times by senior officers of the War Office, twice by the Air Ministry, and three times by officers of the Admiralty, regarding certain problems which might be dealt with by the use of dowsing methods, or by electrical instruments of two types designed by himself and Mr. Franklin on the basis of their recent work on dowsing.

The results of these official inquiries have been disappointing, for though preliminary experiments and tests were in the main successful, whenever the inquiry reached the stage at which the co-operation of the scientific adviser to the Department concerned was required, the inquiry has always abruptly ceased for no assigned reason. One can only suppose that financial obstruction has always supervened; it is also possible that professional jealousy and prejudice may have had something

to do with it, for scientists are not exempt from such human failings; and perhaps, too, the natural refusal of the inventors to provide complete specifications of their apparatus without any guarantee that their rights as inventors would be respected has been a contributory factor.

Experiments are still being carried out by Mr. Maby in the Biophysical Laboratory, in which Captain Trinder is collaborating as far as distance allows. All these experiments, the results of which will eventually be described in the *Journal* and in other appropriate books and papers are mainly directed towards the perfection of a new technique for the analysis of specimens both qualitatively and quantitatively and towards the removal, by means of the artificial energisation of the objectives and the exclusion of unwanted radiation, of certain difficulties which hinder accurate prospection and analysis.

For you must realise that accurate dowsing is an exceedingly complicated operation, in which at least three main classes of radiation appear to be involved, namely, Hertzian waves; free electrons, and perhaps other electrons of greater or less penetrative power; and very penetrating gamma rays; whilst the part played by natural and artificial magnetic fields has been found to be extremely important. And, of course, the dowser is subject to the radiation not only of his objective but, especially inside a confined space, of many other objects as well.

And now we come to the main point of these remarks—the financial one—the cost of running the Biophysical Laboratory which, as I have already said, has been used for the last seven years entirely for research in connection with dowsing; in other words, to further the chief object for which the Society was founded.

Previous to 1935 the expenses of the Laboratory had been met by Mr. Maby from the proceeds of a private legacy and from his fees for the analytical and botanical work in which he is an acknowledged expert. But since that date it has become increasingly difficult to pay the running costs, which average between £250 and £300 per annum. This sum includes rent equivalent, rates, fuel, light and electricity, insurance, stationery, telephone, maintenance of instruments, travelling expenses, &c. Meanwhile, Mr. Maby derives no personal remuneration from the results of his work in the Laboratory, as he gets no financial return for his time and labour.

In June, 1940, through the pages of the *Journal*, an appeal was made for financial assistance from those interested in the objects of the Society, and in two years a sum of about £196 was subscribed. To this amount Mr. Maby has added a sum of £140 odd derived from fees earned by him, and with this sum of £337 he has formed his "Laboratory Research Fund," which he runs as a separate Trust fund. The expenses of the Laboratory

during the past two years exceeded this figure by £180, not to mention the deficit which had accrued during the previous five years. In fact, the total deficit since 1935 amounts to £1,750.

Mr. Maby, not being able to meet this out of his private capital, has had sufficient faith in the future of dowsing to obtain a bank loan of £2,000, the interest on which has to be added to the annual running cost of the Laboratory.

It is obvious that if the Society is to continue to reap the advantages of this Biophysical Laboratory it is up to our members to support it as far as their means allow. The value and prestige of the Society depend on the results it can produce. We have now been in existence for nine years, and if we have justified our existence, a large measure of our success is due to the Research which has been carried out.

In thus applying for financial help for Research, I must remind you that the Society is very cheaply run. We pay no rent for an office and have no paid official. If we wanted to start a laboratory of our own containing expensive electrical instruments, the initial cost would be high and the annual cost, which would have to include a paid assistant, very considerable. I therefore appeal to all of you who have the interests of our Society at heart to be as generous as you can.

* * * * *

Now we come to the Accounts of the Society itself.

You will see from the Financial Statement that we started with a balance of £279 1s., and ended with one of £255 12s. 1d. There was one outstanding liability, namely, £16 15s. for the June *Journal*, so that our actual balance may be said to have been £237 17s. 1d.—about £41 less than last year.

This difference is more than accounted for by the special grant of £50 which was made to Mr. Maby and Mr. Franklin in accordance with the Resolution passed at the last General Meeting. Another unusual item in this year's Statement is the sum of five guineas for audit fee. This expenditure has been avoided in the current year through the kindness of Mr. H. Cecil Stoughton, Treasurer of St. John's Ambulance at Guildford, who has been good enough to audit the accounts.

Apart from these two items and taking the liabilities of £16 15s. this year, and £2 10s. last year into account, expenditure would have been £110 19s. as against £96 6s. 9d. in the previous year, an increase mainly accounted for by the extra cost of the *Journal*.

The receipts were £126 0s. 1d. as against £113 11s. 1d. in the previous year, which is satisfactory.

We had to sell £15 of Defence Bonds to meet the grant of £50.

Otherwise, I do not think the accounts call for any special remarks.

4. The adoption of the accounts was proposed by Mr. Ross, seconded by Dr. Munro, and carried.

A vote of thanks to Mr. Stoughton, who kindly audited the accounts in an honorary capacity, was proposed by Mr. Eeman, seconded by Mr. Taverner, and carried.

On the motion of Lieut.-Colonel Edwards, a vote of thanks to the Chairman for his report, and for his unflagging zeal on behalf of the Society, was carried with acclamation.

* * * * *

After the meeting Dr. H. Parsons delivered an interesting address on "Natural Forces and Physiology."

PROGRESS REPORT, 1939-42

BIOPHYSICAL LABORATORY, BOURTON-ON-HILL, GLOS.

Present Status and Activities

Since the publication of *The Physics of the Divining Rod* late in 1939, intensive research work on outstanding problems of Dowsing and Radiesthesia has been carried on without intermission, and the results have been applied, as far as possible, to immediate national needs. Substantial progress has, it is believed, been made in several directions, and not a little interest has been expressed by officers and technical advisers of the three war services (for whom specific investigations have been made and various field tests successfully accomplished), relative to the radio-prospection methods outlined in our book. These and similar enquiries from agriculturists, landowners and public companies, as well as members of the B.S.D., have involved much detailed correspondence which, together with several lectures to scientific societies by Mr. T. B. Franklin and the present writer, have all helped to spread popular interest in the subject.

In addition, a number of water and mineral surveys have been successfully undertaken by the writer, the fees from which have been duly credited to the Laboratory Research Fund.

together with other sums generously donated by eight B.S.D. members. These contributions have amounted to £140 odd and £196 odd, respectively : total £337 to date. The deficit on working expenses, namely, some £180, has been met by the writer out of private income, as in former years ; but further and more substantial financial assistance is urgently needed, if the Laboratory is to carry on this work unhindered, much as the need for such a public appeal is to be regretted. For, thanks to present taxation and increased costs and the failure of official promises of material support, a considerable annual deficit is unavoidable, despite the most rigid economy and the utilisation of existent stocks in the making of apparatus, &c.

We are especially indebted to Colonel A. H. Bell, Mr. T. B. Franklin, Captain W. H. Trinder and Mr. L. E. Eeman for continued assistance, encouragement and support under trying circumstances, including their substantial contributions, in one way or another, towards the solution of war problems. All these B.S.D. members have visited the Laboratory from time to time to assist or witness the progress of the work : particularly Messrs. Franklin and Trinder, who have been continuously associated with the writer both in theory aud practice. Expressions of good will and appreciation have likewise been received from several official observers representing the Services, who have variously recommended the acceptance of our new methods of detection (stating personal satisfaction, on the available evidence and instrumental results, with the essential validity of such methods), and expressed the opinion that such discoveries promised to be of unusual practical and academic significance sooner or later. In fact, the only difficulties encountered have been in respect of official technical and financial assistance, owing to the obdurate scepticism of certain senior scientific advisers, who form the final court of appeal, towards anything connected with Dowsing. And time alone, with gradual perfection of such methods of detection, is likely to break down that barrier. Meanwhile, however, the work is proceeding apace with encouraging results.

New Instruments

Since the war, three novel physical instruments have been devised by the writer with Mr. Franklin's help for the detection and recording of dowsing radiations, fields and responses, which these instruments have unquestionably and repeatedly confirmed. Descriptions of such instruments and work done with them will, however, for obvious reasons, have to wait until after the war. It may be stated, meantime, that good progress has been thus made towards a far clearer understanding of the nature of the radiations involved and the elimination of certain sources of error and confusion, as follows :—

(1) Weakness and inherent variability of the natural radiation.
(2) Confusion due to the so-called polar reversals.
(3) Insufficient selectivity of objectives of a given nature.
(4) Confusion due to reception of beams from unwanted directions.

The reality of such progress is shown by steady improvement in official and private tests on hidden objects of various kinds, particularly at involved urban or factory sites ; and the ultimate publication of these results should benefit dowsers generally. It may also please them to find that yet further vindication of their traditional ideas is now forthcoming—not possible back in 1939.

But it is increasingly evident that true dowsing will always tend to remain an unusually subtle and delicate business, requiring a high degree of sensitivity and skill on the dowser's part. For, if it is clear that his reactions correspond to certain beams, zones and shells of physical radiation, that can be confirmed both qualitatively and quantitatively by the right instruments skilfully applied ; yet, thanks to the low intensity, variability and high frequency of that radiation, it remains extremely difficult to map out the resultant dowsing fields of manifestations with any rough and ready surety. In other words, automatic physical confirmation remains, at present, a matter of unusual delicacy, patience and finesse—the province of academic research rather than of "foolproof" field practice in unskilled hands.

Nevertheless, the new physical facts now emerging are so striking, and their potential value so obvious to anyone of an imaginative and progressive mind, that their neglect would be criminal. Nor is there anything to prevent the dowser from applying such new knowledge through the medium of the divining rod or pendulum, for practical purposes, as we have ourselves been able to show lately, whatever the remaining commercial limitations of the best available physical instruments. For, granted sensitiveness and skill, what a dowser needs most is a surer knowledge of just what he is dealing with, and so how best to set about his task.

Continuity of Research Work

Existent geophysical prospection instruments of radio receiver type are beginning to achieve results that are analogous to those to be got from dowsing ; but they are very limited in their interpretations as to specific nature, depth or magnitude of the objectives compared with the latest dowsing methods ; and the radiation employed is too easily screened and interfered with by intermediate electrical conductors. So that, in this field, Dowsing remains supreme. Hence the need for further seemingly

" academic " and rather abstract research work to perfect dowsing methods and instruments. Only thus, moreover, can we hope to hasten the day when Dowsing will be credited by the general public and official science. And to do that it must first be proved, beyond possible cavil, that (*a*) dowsers indeed react to demonstrable physical rays and fields of force, and (*b*) that their field technique is thoroughly dependable. Despite much that has already been achieved in late years by modern dowsers and their investigators, that position has not yet been fully attained, nor will it be if we persist in the old methods, foibles and misapprehensions.

That something is still amiss with Dowsing has been impressed on us by our recent dealings with official scientists, whose attitude to the present standards of dowsing achievement, as compared with those of the latest geophysical and radio detection instruments, has what may be called " astringent and tonic properties "—even though that attitude be discoloured by conventional prejudice and scepticism. Such criticisms, in so far as they are justified, must be met by the progressive dowser, if his craft is ever to get full recognition. This Laboratory is, therefore, continuing to battle with the remaining difficulties which official observers have, with their strictly practical sense of values, pointed out since the war. And I am glad to say that the prospects are already distinctly favourable, several previously unrecognised sources of error or misinterpretation having been resolved and checked instrumentally.

This recent laboratory work has, incidentally, thrown a good deal of light on the nature of the various radiations productive of dowsing reactions, which we have been compelled to sort out and try to classify more precisely ; extremely penetrating rays of the " hard " gamma, or even cosmic, ray type being, apparently, involved in addition to electronic and Hertzian (" wireless ") effects. Above all, distinction of specific frequencies relative to different elements and compounds has become increasingly prominent, and this has led us to a novel technique of radio-analysis of quite small specimens, that is somewhat analogous to spectrum analysis and modern X-ray analysis respectively.* This technique has already achieved useful practical results indoors and out, and we hope that fresh light will be thrown by it on the use of samples, &c., and on the " electronic " reactions of Abrams and his followers, which interest some of our members. Full details will be published in due course, after the war.

Artificial Excitation

Finally, it seems desirable to refer to our recent endeavours in the direction of providing a simple form of artificial excitation

* See also references in papers by Franklin and Maby in *B.S.D.J.*, IV. (28), 1940, and in *Royal Society Arts Journal*, LXXXVIII (4559), 1940.

of nearby objectives of any selected kind, whether in air or below ground. These have aimed to kill two birds with one stone; first, to increase and render more steady and dependable the natural dowsing radiation, which is so subject to variations of intensity and phase changes (causing inverted reactions and migrations of the reaction bands associated with objects such as streams and mineral veins, and even in relation to the small scale phenomena of the laboratory); and, second, to increase the dowser's or instrument's selectivity towards objects of a given kind or desired situation (viz., specific and directional responses).

All appears to be going well in that respect, and a new quite simple and portable device is being elaborated and tested in the field, that can be used by an ordinary dowser armed with a rod or pendulum (dowser acting as detector), and that appears to energise the desired "target" and also render his responses more selective and sharply directional. For, as any experienced dowser must realise, the location of underground streams in open country is one thing, but the location of smaller or more specific objects in urban and industrial areas or on the battlefield is a great deal more exacting—as the failure of all the most sensitive and elaborate physical instruments yet devised to that end by non-dowsers has proved. But we are personally satisfied that modernized dowsing science can tackle even this conundrum with excellent hopes of success, though we are, of course, not at liberty to say more than that at the present time.

In all this work there have necessarily been plenty of heart-aches and disappointments, but it is believed that the results already achieved have been well worth the struggle and expense. If we are not mistaken, moreover, the new facts and confirmations of traditional, but previously unexplained, methods should, when eventually published, give a substantial stimulus to Dowsing and considerable encouragement to dowsers who have so long maintained the prestige of their calling despite much public ridicule and scientific antagonism. They may, in fact, feel justly proud of having pointed the way to a new and highly significant branch of physical science.

1/11/42. J. CECIL MABY, B.Sc., A.R.C.S., F.R.A.S.

P.S.—Serious enquiries or personal visits (by appointment) will always be welcomed at the Laboratory, the sole purpose of which is to serve the interests of Radiesthesia and Dowsing and of all (especially B.S.D. members) who may be interested in the subject, as was explained by Colonel Bell in his presidential remarks reported in *B.S.D.J.*, IV. (28), June, 1940.

MAINLY ABOUT RUNNING WATER AND ITS EFFECTS

By W. E. BENHAM, B.Sc., F.Inst P.

1.—Introduction

About ten years ago I failed to use a rod and concluded that I had no powers. This idea was reversed in 1941, when some friends visiting here suggested cutting hazel twigs. Provided thin and pliant shoots were employed reactions were not difficult to obtain.

Meanwhile, my interest had been aroused in the nature of the forces at work through reading Mr. Maby's address to the Royal Society for the Encouragement of Arts, Manufactures and Commerce (*Journal Royal Society Arts*, 19/4/40). On finding that I could get reactions from running water, I sent for *The Physics of the Divining Rod*, by Maby and Franklin, and I soon joined the Society at the invitation of Colonel Bell. The experiments described in the next section were carried out with a whalebone rod which Colonel Bell kindly put into my hands.

As experiments have extended over a total time not exceeding six months, I feel some apology is due to members for this very early presentation. This is more particularly true in that a large proportion of the time spent has been in connection with the investigation of the nature of healing radiations, an aspect concerning which but little is disclosed in the sequel. My original object in joining the Society was to contribute my quotum as a physicist to the question of the nature of the forces which act on the rod. The interest in healing, aroused through the work of Mrs. Kingsley Tarpey, has tended rather to restrict me to indoor work. At the risk of "rushing in where angels fear to tread," some views on the rod are nevertheless included in the following account of some early experiments.

2.—Early Work with Rod

After satisfying myself that the contention that the rod's motions obtained in the hands of sensitives are due to some outside influence acting on the rod, either directly or indirectly, was almost certainly justified, attention was directed in the first instance to observations on the nature of the reaction itself, choosing any spot where a strong reaction could be obtained. This was considered to be a suitable starting point, since there was no reason to suppose that the forces at work would be essentially different from different sources. It will suffice to mention five points which I established. It is not suggested that any of these are necessarily new, but the reasoning based on them is thought to be original.

(*a*) Reactions with the rod were obtained through gloves.

(*b*) Also with the arms of the rod tucked between folded notebooks held in the hands. The hands holding the notebooks were substantially as before (thumbs pointing outwards).

(*c*) With one (or occasionally both) thumb(s) pointing inward along the rod, greatly weakened reactions over favourable spots were obtained.

(*d*) With left arm of rod held in my left hand, the right arm being gripped by a gentleman who had shewn himself entirely insensitive, the rod turned just as strongly as if I alone held the rod. *Inside hands not necessarily held.*

In all of the above the classical grip was employed. No serious work has been done using the reversed grip, beyond establishing that the rod also reacts when held in this way. The further point (*e*) was established using both grips.

(*e*) A plane can always be found such that if the plane containing the rod in the balanced condition lie above this plane, the rod rises; if the plane containing the rod in the balanced condition lie below this plane, the rod falls. In a typical case the neutral plane might slope 5° away from the horizontal, *i.e.*, over a stream.

A few words in explanation of (*e*). By the balanced condition is meant *any* condition in which the rod is classically gripped, is sprung, and is in equilibrium. This condition is to be distinguished from the particular case in which the rod is horizontally balanced. It is true that, as Mr. Maby has pointed out (September, 1942, issue of *Journal*, line 7, p. 121), if the rod is not balanced horizontally, errors in interpretation may arise in the event of the results being erroneously attributed to a horizontally balanced rod. This would then be tantamount to an error in the manipulation of a rod used for the specific purpose of locating underground water or objects. Our purpose here is not at present to locate anything, unless it be the seat of action of the force moving the rod. In consequence, we are free to balance the rod in any manner we please, and to observe the results obtained. Item (*e*), which has been confirmed on numerous occasions, will then be found to be true. Nowhere have I seen this important fact stated, but my reading being limited, I make no claims to novelty in respect of this patently simple result. We now anticipate a result arrived at in the experiments described under section 3, and which will be listed here as (*f*). We state the result in more general form here.

(*f*) If in crossing an area traversed by streams or emanating sundry influences from sources disposed in any manner, the rod reacts in a certain way, then on retracing steps in the opposite direction the rod reacts in precisely the same manner, but with all reactions reversed. That is, those reactions which were up now become down, and vice-versa. This point is in agreement

with (*e*), as may be understood from fig. 1, in which A B might represent a stream, C, C′; D, D′ the 5° and 45° side bands reported by Bovis. Fig. 1 is not to scale, and the inclined lines, representing the neutral planes, have their slopes greatly exaggerated. We shall not lay down any rules for direction here, but simply assert that if the lie of the object is such that falling rod reactions are obtained when the dowser walks from left to right, except over the object where a rising reaction is obtained, the reactions are all reversed as the dowser walks from right to left. Now, considering the band at D, for a falling rod reaction the neutral plane must be inclined above the plane of balance. *In fig. 1 the rod is supposed to be horizontally balanced in all cases.* Similarly at C, C′ and D′, while for a rising reaction at A B the neutral plane must slope downwards. When the dowser faces from right to left, slopes which were previously "up" become

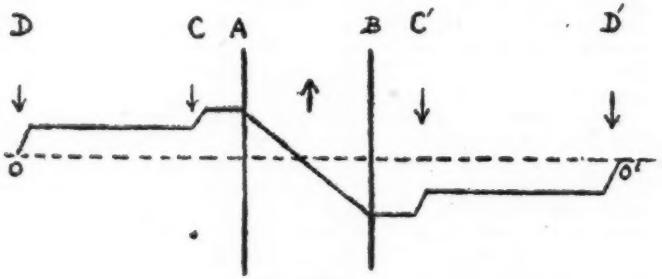

FIGURE 1

Shewing rod reactions (using horizontally balanced rod) as Dowser walks from left to right. Walking from right to left, reactions are reversed since neutral planes slope the other way.

"down," which is just what we want to explain the reversed rod reactions. The broken line represents the neutral plane for the object or stream A B removed. The neutral surface locus of the actual neutral planes has been shewn to meet this line at O, O′, but we have not completed experiments to confirm that there may not be departures from this state of affairs. It is hoped that this conception of the neutral surface, of which a typical section is illustrated in fig. 2, will be of value in clearing up the physics of the force acting.

A tentative suggestion is put forward as at any rate conforming with the evidence detailed above, namely, that the unknown agent which moves the rod comes towards the dowser in a direction lying in the neutral plane. The force to which the agent gives rise can then be split into two components, one acting in a vertical direction and causing up or down movements of the rod, and the

other in a horizontal direction. *The latter component will act so as to push the dowser backwards whichever way he is facing.* The dowser would thus have to lean forward slightly to counteract this thrust. Suppose now he arrives at a band such as A B over a strongly flowing current. The horizontal thrust will abruptly fall to a lower value, since a considerable proportion of the thrust is diverted to a vertical direction. He will thus tend to overbalance forwards. We thus have a plausible explanation of "the slight stagger resembling a trip of the foot" recorded by Maby and Franklin (op. cit. p. 25).

Regarding (*d*), if the muscles were really responsible for the rod's movements, as Maby and Franklyn maintain at such length, how is it that the rod moves in the right hand of the insensitive with the same facility as in my left hand—indeed, the turning of the rod is quite symmetrical and the reaction seems to be quite as strong as with me alone holding the rod. That this can happen without inside hands being held is particularly significant. In order to uphold Maby and Franklin's case something must then pass from me to the insensitive, either across space or via the rod, to make his muscles react and turn the rod. But, if so, then we must consider the "something which passes" as being the *cause* and the changed muscle tonus as being the *effect*. We are thus naturally led to the idea of some fluence entering via the apex of the rod and producing turning of the rod and tautening of the muscles. In the hands of an insensitive the fluence is for some reason inhibited from entering the rod.

3.—Behaviour of Rod and Pendulum as a Stream is Crossed

Let A B (fig. 2) be a stream, lying approximately South-East and North-West. Approaching from the left (north-east) side a narrow band D is found, over which a horizontally balanced rod dips and an ordinary (*i.e.*, not Bovis) pendulum gyrates clockwise. On crossing the band D the rod returns to the horizontal position, while the pendulum oscillates S.E.-N.W. (left of D the oscillation was N.E.-S.W.). At the slightly broader band at C the same dip of rod and clockwise movement of pendulum are found. Between C and the stream band A B is a region over which the rod is horizontal and the pendulum oscillates N.E.-S.W. Over the stream the rod dips and the pendulum gyrates counter-clockwise, the effects in both cases being greatest over the centre of the stream. The distance of the bands D, D′ from the centre of A B equals the depth of the surface of the stream below ground, the corresponding distances of C, C′ being about one-ninth of this depth. In order to achieve accuracy the pendulum should be held only just above the ground.

The above findings, carried out over a stream running under a bridge and another running under the house, confirm those

of A. Bovis (*De La Radiation de Tous Les Corps*), with the difference that with Bovis the oscillations occur always normal to the stream and gyrations are always anticlockwise. While sorely regretting the scarcity of Bovis' pendulums in this country, the use of a plain pendulum (bead on a silk cord) has the distinct advantage that the side bands C, C′ and D, D′ may be readily distinguished from the main (stream) band by virtue of the change in the direction of oscillation of the pendulum as well as by their clockwise gyrations. Thus on inspection of Fig. 2

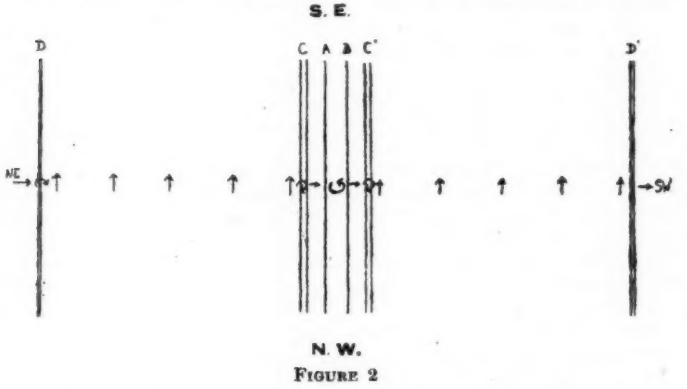

FIGURE 2

it will be appreciated that *only bands for which the direction of oscillation on either side is the same could correspond to the actual source*. Side bands are characterised by a *change* in the direction of oscillation as they are passed over. Possibly the above may be of interest as an exception to the doubtless golden rule that Bovis' remarkable pendulum makes things very much easier. It should be added that all the directions of oscillation and of gyration are reversed if, instead of walking from N.E. to S.W. one walks from S.W. to N.E. across the stream. Facing upstream one gets counter-clockwise swings and dipping rod; vice versa facing downstream. Some other idiosyneracies of a plain pendulum can be turned to good account in connection with the diagnosis of disease.

4.—Are Underground Streams Harmful?

Much has been written concerning the harmful effects of underground streams, but it ought surely to have been revealed to someone that provided one is facing upstream when situated over the main (stream) band (or downstream when over side bands) the influence of the stream is actually beneficial. This may readily be confirmed by a similar test to that described by

Bovis (*Premier Addenda*, chapitre VI., p. 19) purporting to establish that the radiations are harmful. I would tentatively suggest that M. Bovis may have been facing either across stream or downstream when making the test. His second test, over stationary water, does correctly give harmful radiations. Hence, while water is therefore more likely to give harmful results than otherwise, if the streams are moving with sufficient velocity (and this need only be quite small), a beneficial effect may be obtained by suitably disposing oneself.

If a small amount of salt is mixed with fresh water, a reversal of Bovis' result over stationary water is obtained. Hence there is no difficulty in explaining the invigorating effect of nautical life.

The question still remains, that if fresh water is harmful, what about boating on rivers, lakes and canals, and how does the bargee survive? The answer, I think, is that stationary or sluggish fresh water is not harmful to all persons; there is a minority of persons to whom it is beneficial. So far, I have only tested three persons, to one of which the test shews beneficial effects, and should be glad to hear of any results obtained by members of the Society. Bovis' test consists essentially of presenting the pendulum over the palm of the hand to be tested, the said hand being itself over the water (whether running or still). Bovis then finds that his pendulum gyrates over a man's hand, oscillates over a woman's hand, *i.e.*, behaves for him as if the owner of the hand was ill. *With plain pendulum a reaction comprising swing + gyration corresponds to either sex*, the sense of gyration depending on factors to be discussed elsewhere. *If I face upstream the swing and gyration over the palm become much more pronounced, one might almost say violent*; facing at right angles to the stream cuts down the activity to below normal; in fact, to the same value as would correspond to stationary water. Thus, *motion of the stream in a direction at right angles to the direction in which the subject is facing makes no difference*—the stream might just as well be stationary from the standpoint of its effect on the pendulum. *Facing downstream, the activity of the pendulum over the palm is reduced to practically nil, the oscillations are practically indiscernible between very feeble gyrations.*

In order, therefore, to benefit from the existence of any moving water passing under the house, face upstream when sitting over a stream band, downstream when over the bands C, C′ or D, D′. *If in the prone position, the feet should point upstream if one is over a stream band and downstream if one is over one of the side-bands* (*C, C′, D, D′*).

Note added in Proof—A special pendulum, apparently doing everything Bovis claims for his, has now been made. With this pendulum the increased reaction when facing upstream is still obtained.

DR. ABRAMS AND HIS DISCOVERY

By A.H.B.

Many people have heard of Abrams and his box but have no idea who Abrams was or what is meant by his so-called box. A little book called *The Detection of Disease*, by Oscar Parkes, C.B.E., M.B., and Eric Perkins, M.R.C.S., L.C.R.P., both of whom studied under Dr. Abrams, contains an excellent account of the man and his work, and it is from the first part of this book by Dr. Perkins, who now practises Dr. Abrams' methods in this country, that most of the information in this note has been derived.

Albert Abrams was born in San Francisco in 1863. He qualified at a medical college before he was of age or could receive his diploma. He went to the University of Heidelberg, where, in 1882, he graduated again and with the highest possible honours. He spent many months doing post-graduate work in Heidelberg, Berlin, Paris, Vienna and London under such famous masters as Virchow, Frerichs, Wasserman and von Helmholtz, whose scientific influence must have affected the whole of his subsequent career, constantly urging him to endeavour to correlate the laws of Biology with the laws of Physics.

On returning to America he was appointed Demonstrator, then Professor, of Pathology and subsequently Director of Clinical Medicine at the Leland Stamford University of California. In 1893 he was elected President of the San Francisco Medico-Chirurgical Society and Vice-President of the Emanuel Polyclinic. He was the author of numerous important books on medical subjects, and contributions by him were welcomed by leading medical journals throughout the world. He specialised in nervous diseases, and was for many years regarded as amongst the foremost neurologists of the day. He died in January, 1924, and within an hour of his death a cable was received inviting him to lecture on his recent discoveries at the Sorbonne in Paris.

Though a multi-millionaire by inheritance, Abrams' tastes were simple in the extreme. He was obsessed by his work of medical research, and bequeathed most of his fortune to an institution, the Blanche and Jean R. Abrams Memorial, where further research could be carried out and treatment given to the poor. Unfortunately, his will was disputed owing to a legal discrepancy, but a compromise was arrived at which enabled his wishes to be in some degree fulfilled.

Though possessing some of the eccentricities of genius, Abrams is described as one of the most generous and lovable of men, a magnetic personality, and a gentleman in the highest sense of the word. He was full of energy and enthusaism, and worked unceasingly until he literally died of overwork.

So much for the man, and now for the system with which his name is always associated.

In these days of popular scientific literature it is common knowledge that all matter, including animal tissue, is composed of molecules which themselves consist of atoms of the so-called elements such as oxygen, hydrogen, nitrogen and carbon, and that all atoms are made up of infinitely tiny particles of positive and negative electricity—a positive nucleus with, as it were, a system of negative wave-particles vibrating round it. All this belongs to the domain of chemistry, and as such had no direct connection with the diagnosis and cure of disease. True, the chemistry of our tissues is the concern of the bio-chemist; he can discover evidence of malignancy but can seldom say how the disease can be recognised in its earlier stages. The Bacteriologist can recognise germs if he can find them. The Pathologist is chiefly concerned with the examination of tissues by means of a microscope. The study of the atom as such does not lie within the purview of any of them.

The discovery of radium in 1898 opened up a new scientific era, for it revealed the astonishing fact that the elements were not immutable but that atoms of certain elements by the continuous emission of particles of positive and negative electricity spontaneously disintegrated into atoms of certain other elements; the theory of the electrical constitution of the atom, through the work of Röntgen, Becquerel, Crookes, the Curies, Thomson, Rutherford, Bragg and others, followed in due course.

Abrams was the first man to conceive the idea that disease was primarily a problem in which the atoms and molecules comprising the human tissues were concerned. He saw that it was necessary to look deeper than the cell as revealed by the miscroscope and that, to use his own words, "the ultimate atomic divisibility of matter was represented by the electron and not by the cell."

He exploited the physicists' conception that all matter is constantly emitting radiation, conceiving that this radiation was as specific for human tissue as it was for matter in other forms, and that tissue, injured by disease, would emit a radiation differing from that of normal tissue; in short, that every diseased and therefore abnormal atom or molecule would exhibit its own characteristic radiation.

Having determined to study disease on this basis, Dr. Abrams' first difficulty was actually to detect the radiations he wished to study. He had no doubt of their existence, but there was no instrument sufficiently delicate to meet his requirements. It is said that he hired a staff of electrical scientists to assits in his search, and, money being no object to him, he undertook to give a large reward to any man who could devise an instrument which would detect and differentiate between the radiation having its origins in, for instance, the cancer, the syphilis, or the tubercule molecule respectively. However, despite claims by

workers of the Abrams school, such as Starr White, Boyd and Wigelsworth, official recognition of such an instrument is not yet forthcoming.

Whilst his electrical experts were experimenting with a number of electrometers, voltmeters, amplifiers and galvanometers in various combinations, Abrams himself outstripped them all through a brilliant clinical observation, the starting point of twenty years of unremitting labour, which was terminated by his untimely death whilst still at work in his laboratory. This is how it happened.

He had been conducting investigations connected with the nerve mechanisms of the stomach, its contractibility in varying circumstances of health and disease, and its response to the stimulation of certain nerve trunks by mild electric currents.

Now the outline of the stomach can be defined by what is called "percussion," that is to say, by tapping with the middle finger of the right hand on the middle finger of the left hand placed gently on the abdominal wall. Exceedingly delicate and skilled technique is needed to obtain accurate information from the varying changes in pitch and resonance which an expert can elicit in the difficult art of percussion, and Abrams was a pastmaster in the art.

Many patients underwent examination by him, amongst them a middle-aged man, healthy enough to all appearance apart from a small chronic ulcer on his lip, known as epithelioma, a form of cancer.

The patient was asked to stand up whilst Abrams gently percussed over the upper part of his abdomen in an attempt to define the border of the stomach. Much to his surprise, Abrams found that several square inches of the man's abdomen, not exactly corresponding to the stomach area, sounded dull to his percussion instead of hollow, as a drum sounds hollow, and for the same reason—because air is behind it.

The patient was then told to lie down on a couch in another part of the room so that Abrams could "palpate" the abdominal wall, that is to say, feel for the possible presence of any kind of solid mass which might account for the dull percussion note he had just elicited. But he could detect nothing of the sort. More amazing was the fact that when Abrams percussed the man standing, still in that other part of the room, the note given out was still undeniably hollow or resonant.

Abrams returned again to his chair, placing the patient exactly where he had stood when the first observation was made. Again he percussed that area just above the navel, getting exactly the same result as he had at first—a dull note as if a bladder of lard had been substituted for the man's air-filled abdomen.

By this time Abrams was aflame. He knew he could trust his percussion technique and he was absolutely sure that, in

this patient's case, the note elicited *when the patient was facing in one direction differed entirely from that produced when the patient was facing in another direction.* Time after time he percussed his unfortunate patient, facing him in various directions, and the result of that long afternoon's work was to establish beyond reasonable doubt the astounding fact that the patient with the cancerous ulcer on his lip had a well-defined area on his abdominal wall which sounded dull to percussion when he faced west,* but sounded normal, that is, hollow, when he faced in any other direction.

The phenomenon which Abrams that day discovered was subsequently called by him an "Electronic Reaction," but that was after several years of prolonged and laborious research.

The patient was told to present himself for further work next day, when the first observation was repeated and verified, and an additional one made. A second area, quite dull to percussion, when the patient stood facing west, was found over the region of the inner border of the man's left shoulder blade though no auscultation of the chest revealed any abnormality. Many other non-cancerous patients were examined that morning, but none of them revealed those two strange patches of dullness. A search was made for sufferers from cancer in its early stages in various wards and dispensaries, and some were found. In each case Abrams was able to satisfy himself of the existence of the same two dull areas, one just above the navel and the other over the inner border of the left scapula.

After days of painstaking observations on scores of patients Abrams at last allowed himself to entertain the notion that some kind of radiation, originating in the doubtless abnormal and characteristic molecules which formed each cancer cell, might be picked up by certain definite groups of nerve fibres, and that these nerve fibres caused a reflex muscular contraction, detectable by percussion, to occur on the patient's abdominal wall and thorax—on the analogy of the wave frequencies picked up by fibres of the optic nerve, which cause a muscular contraction of the pupil. The fading effect which invariably occurred when the patient was facing north or south might, he thought, be due to some deflection of the waves by the earth's magnetic field. For Abrams had been a pupil of Helmholtz; he knew vastly more about physics than the average doctor and was aware that in a fashion, atoms and molecules might be regarded as broadcasting stations emitting electromagnetic waves, each type of atom sending out its own characteristic wave.

Having conceived this notion, Abrams carried out a long series of experiments. Satisfied that the mysterious percussion phenomena which undoubtedly occurred on the abdomen and thorax of every patient suffering from cancer were reflex phenomena resulting from faint stimuli caused by specific radia-

* i.e., at right angles to the horizontal component of the earth's magnetic field.

tions originating in the molecules of the cancer mass, it occurred to him to ascertain whether any similar reflex could be detected on the same areas of the body of a *healthy* young man when in close contact with a cancer specimen from the operating theatre.

For this apparently factastic experiment he chose the healthiest young fellow he could find among his class of students. To begin with, he made the boy stand facing west, and percussed carefully the area of the abdomen just above the navel, and, as he expected, elicited a clear and ringing note. Then, a small fragment of a malignant tumour just cut from a patient, and placed in a metal container, was applied to the boy's forehead. Within two seconds the percussion note dulled slightly and rapidly became as entirely dull as if the boy had been transformed into a plaster cast. When the boy was facing north the resonance returned; when again facing west the dull note recurred; when the cancer specimen was removed the percussion note again became normal, that is, hollow sounding.

From this striking and epoch-making experiment, opening up as it did a new expanse of hitherto inconceivable possibilities from both the physical and medical point of view, Abrams felt justified in believing that the phenomenon observed on the nerve-muscle apparatus of the boy who was the subject of the experiment was a reflex response to a stimulus originating within the molecules of the cancer mass. He eventually named the phenomenon a "Reaction" and the boy came to be known as the "Subject" or "Reagent."

The experiment was repeated and verified thousands of times, not only by Abrams, but by a band of enthusiastic followers, including, in this country, Sir James Barr, a past President of the B.M.A., who described Abrams as by far the greatest genius the medical profession had produced for half a century.

Abrams then decided to find out whether the suspected radiation from the cancer specimen would pass along a wire and produce the reaction. To this end he got a six-foot length of ordinary copper flex wire, one end of which was soldered to a small disc of aluminium, and the other to a large disc mounted on an insulated handle. The small disc (or electrode) was fastened by an elastic band to the Subject's forehead, the handle of the larger disc (or electrode) being held by an assistant who was placed, with the cancer specimen, behind a screen, where neither Abrams nor the Subject could see him or be sub-consciously influenced by his movements. The assistant was told to point his electrode towards the ceiling until he (Abrams) had demonstrated the clear ringing percussion note on the Subject's abdomen, then to bring the electrode to a position immediately above the cancer specimen, after a few seconds remove it, then replace it and so on. The experiment was a complete success! The percussion note changed from hollow to dull every time the

hidden assistant brought the electrode near the specimen.

In his next experiment Abrams replaced the excised cancerous tumour by two female patients, one with an abscess on the breast, and the other with a breast cancer. The reaction did not occur when the disc was pointed towards the abscess, but did occur exactly as before when held in front of the cancerous breast.

Thus was made the first diagnosis by the Electronic Reactions of Abrams, known in short as E.R.A.

After this, Abrams naturally turned his thoughts to the possible existence of other pathological reactions, and he set out to attempt to discover a reaction on the Subject's abdomen under the two following conditions :—

(*a*) When the disc at the end of the six-foot wire flex was fixed to the Subject's forehead and the other electrode was placed in close contact with a *tubercular* specimen.

(*b*) When this electrode was held immediately in front of a tubercular centre on some part of a living patient's boyd.

The Subject, stripped to the waist, was stood facing west, the electrode was placed by an assistant over a tubercular specimen, Abrams, as before, percussed over the area immediately above the navel, but the note now remained resonant, as the normal note should be. Abrams continued to percuss, trying other areas, and he quickly found a dull patch this time about one inch *below* the navel. He repeated the experiment over and over again with different pathological specimens of tubercular material and always with the same result.

He then tried the experiment when the electrode was applied to the chest of a man with obvious symptoms of pulmonary tuberculosis—again with the same result.

From his next experiment he found that an area existed about an inch to the left of the navel which responded to streptococcal infection, whilst an area characteristic of malaria was a little patch about two inches below and two inches to the left of the Subject's navel, the observation being made first from a sample of malarial infected tissue and then from a malarial patient, when the electrode was placed over the spleen or over the liver.

In trying to find the characteristic "diagnostic areas" for syphilis and sarcoma, Abrams was temporarily baffled, as he found that in each case the dull patch was identical with the cancer diagnostic area. But Abrams was a man of great determination and infinite perseverance, and one day an inspiration came to him. It was the outline of his hypothesis that the reactions were caused by electro-magnetic waves of different frequencies and that these waves were characteristic of the molecules from which they were derived. Thus he conceived the idea of an adjustable instrument interposed between the specimen and the Subject—as a very rough analogy like a long brick wall with a number of doors in it, each door corresponding to a

particular wave through which that wave alone could pass whilst the door was open.

An ordinary rheostat had something of this "wall and door" effect, and he had an old resistance box ready to hand possessing 61 different resistances which could be put in circuit by means of a pointer. Abrams cut his six-foot wire in two; the ends of one three-foot length were fastened to an electrode and a terminal of the rheostat respectively; one end of the second length was fastened to the other terminal, the other end being attached to the Subject's forehead. The assistant placed his electrode over the cancer specimen and the pointer of the rheostat was set at a certain resistance stud, chosen haphazard.

Abrams percussed the Subject's cancer diagnostic area and was delighted to find that no reaction occurred. He then told the assistant to "twiddle the knobs about" with his free hand. After a time he cried out "Stop!" The pointer of the rheostat was at stud 50, and the old familiar "reaction" dullness had appeared. It was lost on 49 and 51, but came through faintly on 30. In other words, the cancer wave had squeezed through door No. 30, but had passed easily through "door," or stud, No. 50, when the reaction was as definite as it was without the rheostat.

With some anxiety Abrams tried a sarcoma specimen which, without the rheostat, had given the same reaction as cancer. The assistant turned the pointer from one resistance to another, and after many anxious moments the Subject developed a reaction. Sarcoma had come through on 58 and it came through on that number alone—NOT on "50" and NOT on "30"! And it was found that syphilis came through on 55 only—not on 50, and not on 58.

Through years of patient toil Abrams compiled a book known as "The Atlas," in which were charted the diagnostic areas, and their appropriate dial settings on a type of rheostat which Abrams devised for the purpose.

This simple rheostat which Abrams called in its new connection a "Reflexophone" (now believed to function as a variable inductance) is the instrument which—under the name of the Magic Box—so much nonsense has been written by the ignorant and sceptical.

In the course of time Abrams adopted several devices which made the reactions more definite. For instance, the dull note indicating a reaction was sensibly increased if the Subject was made to stand on earthed metal plates; he found that if the reaction area was lightly stroked with a glass or vulcanite rod, the latter seemed to drag slightly when a reaction was present and slip along more easily when the reaction was abolished; he also found that reactions were more pronounced when he worked in a darkened room; again, some of the reactions were

increased or diminished by approaching one or other pole of a powerful bar magnet to the specimen under examination. The reactions were more definite if the specimen under examination was placed in a vulcanite container within which was an earthed metal electrode, the lid being a condenser formed of three-inch discs of aluminium and mica. This receptacle he called a "dynamiser."

For years Abrams continued to make additions to his Atlas from observations on patients and from specimens. His life's task was to discover a method of detecting the often abstruse causes of conditions which do not in their earlier stages produce gross changes in tissue with recognisable physical signs—in other words, he was striving to anticipate disease, *i.e.*, to detect disease in its earliest beginnings, before gross structural damage (on the evidence of which present-day clinical diagnoses chiefly depend) had even begun to occur.

He had no desire to displace the orthodox methods of diagnosis, but when these failed to solve his problem he supplemented them by the use of the Electronic Reactions, thereby gaining additional and confirmatory information which could be obtained by no other means.

Abrams made a notable step forward when he discovered that a single drop of blood was sufficient to produce the reactions indicative of the disease suffered by the patient from whom the blood had been taken. He was prompted to this experiment by the consideration that if, as stated by physicists, 18 grammes of water contained 606 x 10^{21} (six hundred and six thousand million billion) molecules, surely a single drop of blood must contain a vast number derived from the focus of disease through which the blood is continually passing; and if the disease were tubercular or malarial, a drop of blood would contain even more, and such molecules would all be giving off their characteristic radiation. Could these radiations be detected—and identified?

Abrams took a drop of blood from a cancerous, a tubercular and a syphilitic patient, and in each case the characteristic reaction was clear and definite. So far, then, Abrams' triumph was complete.

* * * * *

On May 23rd, 1922, an experiment was carried out in London to test the truth of this extraordinary discovery. Dr. C. B. Heald, Medical Adviser to the Director of Civil Aviation, Major H. P. T. Lefroy, Head of Wireless Research at the Air Ministry, and Lieut.-Colonel Tizzard, brought four specimens of blood to be tested by Dr. Mather Thomson, one of Dr. Abrams' students and followers. He had been assured that all four specimens were pathological. The instruments used were similar to Abrams', and Dr. Heald acted as the Subject. Three specimens were correctly diagnosed as syphilis and cancer, and one healthy

one which had been provided by Dr. Heald himself; the fourth, diabetic, was diagnosed as tubercular, which was possibly correct as the diabetes may have been, and probably was, due to a tuberculous lesion of the pancreas.

* * * * *

Abrams later on developed an addition to his original diagnostic rheostat in the shape of an instrument which enabled him to judge of the severity of any infection. It was a kind of volume control. If the disease were severe it would, so to speak, force its way through a resistance showing a higher reading than if the disease were in a mild stage. Blood from a patient in a precancerous stage might produce an unmistakable reaction though showing a low reading on the dial. Even cancer has to have a beginning; there must be a cause behind the formation of the first pathological cell, and Abrams believed that this cause had to be sought in the atoms which make up the cell. "Regard cancer not so much as a structure, but as a *process*," said Abrams. He further believed that if cancer could be detected before physical signs were apparent, that is to say, before diagnosis by so-called orthodox methods were conceivable, before any tell-tale tumour-mass or "lump" had formed, it should be possible to devise a non-surgical method of treatment and cure. Holding that the beginning of disease was a disturbance of electronic equilibrium within the molecule, he sought a means for restoring the lost equilibrium. To this end was evolved his treatment instrument, the "Oscilloclast."

The man primarily responsible for the production of the oscilloclast was Hoffmann, the inventor of the Zeppelin detector. It was designed to embody Abrams' requirements, to wit, the neutralisation of the waves issuing from the diseased tissues as shown by the blood reaction obtained on the "Subject" *via* the Reflexophone—by restoring the electronic balance.

Briefly, the original oscilloclast, which could be used either with direct or alternating current, consisted of two main parts, (1) a box containing an electric motor connected to the external electric main, and an arrangement of coils, and (2) a dial-pattern resistance box with ten resistances varying from 100 to 1,000 (numbered 1 to 10) from which a single lead could be taken to the patient. By means of a pendulum attached to the armature the magnets of the motor were energised at regular intervals, connection with the resistance box being made once during each period of energisation.

An arrangement of coils was connected in parallel with the lead between the motor and the resistance box.

The action of the oscilloclast as reported on by Professor Taylor-Jones, Dean of the Faculty of Physics at Bangor University, may be summarised as follows:

(1) The patient (who is insulated from the ground) is subjected

200 times a minute to an electrical impulse from the negative main,* which would impart a certain amount of negative electricity to his person, making his voltage with ordinary good insulation about 170 (that of the mains being about 200).

(2) Shortly after every alternate electrical impulse another impulse of electro-magnetic origin is produced in the apparatus and transmitted to the patient. The intensity of these impulses varies with the resistance in series on the lead, being least when contact is at 0 and greatest when at 10.

(3) An electrical oscillation is produced in the apparatus about 100 times a minute, of a frequency of about six million, corresponding to a wave-length of 50 metres.

The patient was insulated from the ground and the electrode attached to the lead from the resistance box was applied to the seat of the disease. Treatment was given for about an hour a day over a varying period of time, the resistance being varied according to the nature of the disease. If the diagnosis had yielded more than one reaction it was usual to give treatment with the appropriate resistances successively. Intermediate grades of resistance were obtained by inserting an extra rheostat in series, with the main one. Treatment was continued until no reactions were elicited from a blood specimen under diagnosis.

Such in outline was Abrams' system of diagnosis and treatment —*diagnosis* with the reflexophone through the agency of a healthy Subject, and *treatment* with the oscilloclast direct to the patient.

* * * * *

Abrams has many followers in America and Europe, and his instruments have been developed and modified at the hands of various operators. There are schools in America at which instruction in E.R.A. is given, and there is an American Electronic Research Association which issues a monthly journal.

For some years an Abrams Society existed in England under the presidency of Dr. Mather Thomson. This has now been replaced by a medical Society, with a wider scope, for the study of Radiesthesia from all angles. The first president was Dr. Ernest Martin, and the present one is Dr. Guyon Richards.

Abrams died in harness in January, 1924. During his life and more so after his death he was subjected to much detraction and abuse, as are all originators of unusual ideas and methods. To begin with, he was a Jew ; he charged high fees and sold his instruments at high prices ; but what he gained was for the most part devoted to a charitable end. Apart from the utterly novel lines of his investigation, many of his experiments and claims were regarded as fantastic. For instance, his treatment with gamboge, his claim to distinguish sex and to be able to diagnose from a specimen of handwriting. Yet we dowsers now know that sex is readily distinguishable in terms of the electro-magnetic

* Presumably this occurs only when D.C. is used.—A.H.B.

polarity of body organs and limbs, and perhaps also through the effect of sex hormones, and that paper which has been in contact with a human being can act as a "sample," whilst treatment by colour is now quite usual. But perhaps his greatest fault in the eyes of his detractors was that, by using methods which outraged all medical tradition, he achieved undoubted success.

* * * * *

In 1924 an investigation on E.R.A. was conducted in this country by a Committee consisting of two doctors and three scientists under the chairmanship of (then) Sir Thomas Horder. Their Report was read before the Royal Society of Medicine on January 16th, 1925, and it was subsequently published under the title, *A Preliminary Communication concerning the Electronic Reactions of Abrams, with special reference to the Emanometer Technique of Boyd.*

It should be explained that Dr. W. E. Boyd, M.D., of Glasgow, is a follower of Abrams, and that his Emanometer is a development of the Reflexophone. Dr. Boyd, of course, has to make use of a human "subject" facing west, and the reactions he obtains are those charted by Abrams.

The avowed object of the investigation was "to determine as conclusively as might be practicable whether there be any valid basis for the claims put forward in respect of the so-called 'Electronic Reactions' of Abrams or of any analogous technique allied thereto or developed therefrom."

The members of the Committee were M. D. Hart, A.M.I.C.E., M.Sc., D.I.C., Dr. C. B. Heald, C.B.E., M.D., M.R.C.P., Lieut.-Colonel H. P. T. Lefroy, D.S.O., M.C., A.M.I.E.E. (now B.S.D.), W. Whately Smith (now Carington), M.Sc.

Mr. Hart and Mr. Whately Smith were engaged on physical research work on behalf of the War Office and Air Ministry respectively. Dr. Heald and Lieut.-Colonel Lefroy have already been referred to as having conducted a test with blood specimens.

It is stated in the Introduction that the inquiry was limited to the diagnostic aspects of the technique and that the conclusions arrived at apply solely to the Reflexophone of Abrams and to Dr. Boyd's Emanometer. The instrument, however, appears to differ from Abrams' Reflexophone in several important respects; in fact, it is stated that it "appears actually to be a design *de novo* based on a different conception of the phenomena involved." However that may be, the use of a normal human being as a Subject on whom abdominal percussion was carried out was the same. An outstanding feature of the Boyd apparatus was the use of earthed metallic screens made of sheet copper or of copper gauze intended to eliminate contamination from external sources.

After a number of preliminary tests and experiments it was

decided "to rely exclusively on tests of such a character that the value of the results obtained could be unequivocally computed by mathematical methods." To this end certain crucial tests were carried out (under strict control) by Mr. Whately Smith on June 6th, 1924, in Dr. Boyd's laboratory at Glasgow.

The first test consisted in discriminating between two apparently identical substances indistinguishable by normal means. Of 25 successive trials, all were successful. The chance of this result being obtained by accident is 1 in 33,554,432!

The second and third tests involved the selection and identification of one specific substance from among a number of others. Both were completely successful. The chances of accidental results were 1 in 180 and 1 in 7,776 respectively.

The fourth test was a repetition of the first. The operator gave 18 correct replies out of 20 trials; the two errors were probably due to faulty manipulation by the experimenter. Even if this possibility be ignored the chance of an accidental result is 1 in 5,518.

The fifth and last test was one in which a specimen could be cut off by a movable screen from the receiving plate of the apparatus. All of 16 trials were successful. The chance of this being due to accident is 1 in 65,536.

It was clear from the figures that the results could not be ascribed to the operation of chance alone; the only alternative explanation to accepting the phenomenon as genuine was to assume that Mr. Whately Smith had failed in accuracy or had been imposed on by trickery. The experiments were therefore repeated before Mr. E. J. Dingwall, M.A., the research officer to the Society for Psychical Research, who had made a special study of methods of deception. The tests witnessed by him were substantially the same as those carried out by Mr. Whately Smith and the degree of success was equally impressive.

Sir Thomas Horder and Dr. Heald each acted as Subject and operator during the tests, and when acting in the first capacity could definitely feel an alteration in their abdominal muscles as specimens were inserted or withdrawn without their knowledge.

Amongst the conclusions arrived at by the Committee was the following:—

> ". . . . that the fundamental proposition underlying, in common, the original and certain other forms of apparatus devised for the purpose of eliciting the so-called Electronic Reactions of Abrams is established to a very high degree of probability . . ." and "that no evidence justifying this deduction is yet available from the work of those who practise with the apparatus as designed by Abrams himself."

It is emphasised in the report that the conclusions "are not in the slightest degree pertinent to the diagnosis or treatment of disease in any practical sense."

In view of the enormous amount of evidence available in America it is legitimate to doubt the validity of the second conclusion quoted above, and one cannot help wondering why the experiments were not carried a little further so as to show their pertinence to medical diagnosis—as might well have been done. Two members of the Committee had already witnessed the efficacy of Abrams' Reflexophone in connection with blood specimens. Why should not further experiments have been carried out on the same lines? In the Foreword it is stated that the Communication is preliminary and "that the work must be continued and that the nature, significance and the practical application of the facts here brought to light must the studied fully."

This does not appear to have been done—at any rate by the Committee—and eighteen long years have passed by!

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It is a contrast to turn from this Communication, generally known as "The Horder Report," with its undercurrent of critical distrust, to a book called *Abrams' Methods of Diagnosis and Treatment*. It was edited by the late Sir James Barr, C.B.E., D.L., F.R.S.E., LL.D., M.D., F.R.C.P., one of those broadminded and enlightened men who took full advantage of Abrams' wonderful discoveries. In his Foreword he criticises very adversely the Horder Report, especially for "the reflection cast upon the honour of Abrams' practitioners . . . . in a statement, in support of which no evidence could be brought, that they were 'ethically unjustified' in helping the sick by the use of Abrams' methods." The book contains an appreciation of Abrams and a description of his methods, after which the author gives records of a number of cases in which the treatment was used, viz.: eight of Tuberculosis, ten of Cancer, four of Exopthalmic Goitre, three of Chronic Colitis, nine of Arthritis, three of High Blood Pressure, three of Duodenal Ulcer, and thirty-eight miscellaneous cases. All had been treated by the oscilloclast with good results, but in two cases of cancer the patient had died after having experienced considerable relief. Many of the cures are of a most striking nature; there is one labelled "Undiagnosed," in which a woman of twenty who had suffered for nearly a year "from prolonged and severe attacks of pain in the head and ear following an acute febrile attack of an influenzal character." She had been seen by more than 30 specialists; she had been given morphine and heroin, had a wisdom tooth and neighbouring molar extracted, been given mercurial inunctions and potasium iodide internally, had leeches applied over the mastoid, Arnold's nerve excised, received diathermic, deep X-ray and radiant heat treatment. Being no better, she decided to try Abrams' treat-

ment, though exceedingly sceptical of the result. It was begun on January 7th, 1924, and by October 15th she was quite well.

The book ends with the report by Professor E. Taylor-Jones on the electrical properties of the oscilloclast, already referred to.

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Of a rather different type is a little book called *The Abrams Treatment, an Investigation*, by G. Laughton Scott, M.R.C.S., L.R.C.P., B.A. It may be epitomised as a grudging and cautious recognition of the value of Abrams' treatment. Forty-five cases selected from the work of three practitioners (including Sir James Barr) and nine experimental cases undertaken by the author are reviewed. In his conclusion he states that "he is unable to avoid the conclusion that the instrument exercises in favourable cases an exceedingly powerful influence on general health, which in the treatment of particular diseases may be, and frequently has been, very useful."

In an Appendix there is a report on the oscilloclast with a diagram, by Mr. A. S. E. Ackermann, A.M.I.C.E., and Mr. William Clark, A.M.I.E.E., the result of an examination of an instrument made in October, 1924. It differs essentially from the report of Professor Taylor-Jones which was dated April, 1925, in that no mention is made of the impulse of electro-magnetic origin and the electrical oscillation which Professor Taylor-Jones has carefully recorded.

However, all this is ancient history. Knowledge of electric wave action has increased enormously during the last twenty years, and to-day there is probably no question regarding the oscillatory effect which is the keynote of Abrams' treatment. No doubt the man who invented the Zeppelin detector had as good knowledge of electrical theory as any of his contemporaries. Even to-day much difference of opinion exists amongst experts on certain fundamental points, such as whether the inductance of a straight wire increases or decreases when it is bent into a circle. What is the correct answer?

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NOTES AND NEWS

Mr. Herbert George, of Auckland, New Zealand, writes:—

In reply to the article in the *Journal* of the B.S.D. of March, 1942, by D. O. King, re the "Pogson Motorscope," I would like to tell of my experience with the motorscope. The idea came to me through Theodore Besterman's book, *Water Divining*. I first of all made one of copper wire; it was good, yet not quite satisfactory owing to its affinity to anything copper, or containing. Then the idea came that if I had a pointed wooden stick with steel pins one each side, that was better; but it responded to iron or steel objects. The next step was to put black beads, glass, or strong brass pins; this was excellent, as my body was completely insulated from the stick. From then on I got the best of results, and the same stick does for everything, and very sensitive; it, with the use of coloured cottons as samples, is most remarkable. With me the stick revolves in complete revolutions when in tune with the substance under test; if testing for sulphur in coal, then you might only get a fraction of a turn if the sulphur contents of coal is very small, so in testing various grade of coal it is easy to see the contents of each sample; one might give ½-turn, while another 6 turns, another 2 turns, and so on, and the revolutions are in the positive direction; should it turn the negative way I know that I am not in tune. In the same *Journal* is an account of the late Mr. J. Timms, in his experiment to test the power of divining at a height from an aeroplane. I tried that out on a trip from Auckland to Wellington in December, 1940. The first sample I used was coal over the region of the mouth of the Waikato River, and got ample evidence that coal existed under the sea bed for a considerable distance. The next test was far oil. This was at 5,000 feet over the Taranaki district quite close to Mt. Egmont. I got an indication of a narrow band stretching south-east to north-west; from the narrowness of the band concluded that the oil must be in a fault, which traverses across Taranaki. Nearer Wellington I tried for water. Sitting by the side window I had a clear view of the country below and learned from this experience that water has a very narrow angle ray. I noted the time and action when crossing the river. The angle of the ray is approximately 75°. Continuing the trip from Wellington to Nelson, with a steel sample I got a reaction over buildings built on a steel frame. Then over the other side of Cook Strait over the Marlborough Sounds. I tried samples of Gold Chloride, and pure gold, and got indications of both in the valleys below. Returning to the finding of oil, a great deal of money has been spent in this country. Just recently in the Taranaki district a well was sunk to just over two miles at a cost of over a million, only to be abandoned, having failed to find oil. This well and two others had been selected by Geophysic experts from America, but no oil in either case.

The *Western Australian Daily News* of June 27th contained a note headed "Submarine Diviners," stating that a Sydney inventor had puzzled the Army Invention Directorate by locating enemy submarines as "he sits in his office fingering the twig of a tree"; and that he has a rival in Melbourne who has invited the Directorate to throw a kerosene tin into Albert Park Lake, when he will tell where it can be found.

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The *Somerset County Herald* of August 8th contains the following interesting quotation from Billingsley's "Agricultural Survey of Cornwall," 1797 :—

Among Mendip miners "the general method of discovering the situation and direction of these seams of ore (which lie at various depths, from five to twenty fathoms, in a chasm between two inches of solid rock) is by the help of the divining-rod, vulgarly called *josing;* and a variety of strong testimonies are adduced in supporting this doctrine. So confident are the common miners of its efficacy that they scarcely ever sink a shaft but by its direction; and those who are dexterous in the use of it will mark on the surface the course and breadth of the vein; and after that, with the assistance of the rod, will follow the same course twenty times following, blindfolded."

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An article by Leonard Mosley, correspondent of the *Daily Sketch* in Egypt, which appeared in the issue of August 15th, describes the work of the official water diviner to the Allied forces, a Canadian Major and a friend of Mr. Mosley's. It is stated that he has found new sources of supply in The Transjordan and Irak, in Syria and Persia, and in the Sudan and Eritrea during the advance to Asmara in 1941. "His methods are strictly scientific. He works on geological surveys and is an expert in Middle East rock formations."

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In the *Irish Times* of September 5th there is a note on a Mr. James Farrar, of Clontarf, who has located springs in all parts of the country for the Land Commission and other bodies. His sole equipment is a hazel twig and a boxwood ball. One of his recent jobs was the location of a water supply for one of the new turf camps at Derries in Offaly.

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At a meeting of the N. Kesteven Rural District Council on September 18th, as reported in the *Lincolnshire Echo* on the following day, the *Lincolnshire Chronicle* of 26th, and the *Municipal Journal* of October 16th, the Clerk (Mr. R. Epton) stated that in connection with the proposal to sink water bores at an estimated cost of £3,600, he had called in Mr. G. W. Robinson (B.S.D.), of Scothern. Mr. Robinson came to the conclusion

that there were much better sites for the water than those selected. The consulting engineers, who did not altogether approve of water diviners, asked that a conference should be held with Professor Fearnside, of Sheffield. A meeting was held at the spot, where the Council's Surveyor, Mr. J. Chadwick, also a water diviner, corroborated Mr. Robinson's location, which was further supported by Professor Fearnside, and it was decided to sink the bore at the spot indicated.

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The *Cambridge Daily News* of October 8th describes in a short article how a diviner who had been engaged by the Surveyor of a London Borough set about locating the exact position in the road of a drain which had to be excavated.

We have been informed that the Borough in which this incident took place is Acton.

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A note in the *Bradford Telegraph and Argus* of October 28th contained a reference to this Society and stated that a friend of the writer, who is a member, was about to begin a search for some communion plate which had been stored away in a West Riding Church hundreds of years ago.

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A discussion on dowsing by the Brains Trust on October 27th contained much that was misleading and immature.

In connection with this discussion a writer in *Psychic News* of November 7th states that the B.B.C. are indebted to water divining for the supply to a broadcasting transmitter on the Isle of Anglesea which was established a few years ago. The nearest water supply was miles away, and just as it had been decided to lay supply pipes at a cost of several hundred pounds an amateur dowser told the civil engineer there was sufficient water beneath the site. A well was accordingly sunk and a supply of 450 gallons per day obtained.

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Two talks on divining for water and minerals were broadcast to Portugal by the B.B.C. at the end of July. The material was provided by two of our members and translated into Portuguese by the Corporation's staff.

BRITISH SOCIETY OF DOWSERS

Financial Statement for Year ended 30th June, 1942

RECEIPTS.

£ s. d.		£ s. d.	£ s. d.
	Brought in 1st July, 1941—		
	Cash at Bank ...	10 8 4	
	Cash in hand ...	6 3 2	
	Deposit Post Office Savings Bank ...	12 9 6	
	Defence Bonds ...	250 0 0	
259 6 8			279 1 0
91 17 6	Annual Subscriptions		101 0 6
3 3 0	Life Subscriptions		8 19 0
7 9 5	Sale of Journal		7 1 7
1 11 0	Sale of Publications		—
1 3 9	Sale of Badges		1 3 6
6 16 5	Interest on National Defence Bonds		7 10 0
1 10 0	Interest on Post Office Savings Bank		5 6
£372 17 9			£405 1 1

PAYMENTS.

£ s. d.		£ s. d.	£ s. d.
19 11 7	Postage and Cheque Books ...		22 0 8
63 4 0	Journal		63 18 3
7 0 2	Printing and Stationery		3 10 7
2 10 0	Annual Meeting		4 10 0
1 11 0	Publications		—
	Special Grants		50 0 0
	Audit Fee		5 5 0
	Loss on realization of National Defence Bonds		4 6
	Balance on 30th June, 1942—		
	Cash at Bank ...	20 12 1	
	National Defence Bonds	235 0 0	
279 1 0			255 12 1
£372 17 9			£405 1 1

H. M. EDWARDS, *Hon. Treasurer.*

I have examined the above Receipts and Payments Account with the Books and Vouchers and certify it to be in accordance therewith.

July 22nd, 1942.

A. CECIL STOUGHTON.